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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

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REPLY TO: 5230 Evaluation July 10, 1978

SUBJECT: Insect Evaluation (Sierraville)

TO: Forest Supervisor, Tahoe N.F. 20,000 acres

In response to a telephone request from Phil Aune, entomologist John Pierce met with Ron Strong on June 29, 1978 for a field review of insect problems on the Sierraville District.

In west side mixed conifer and true fir stands, tree mortality is showing up in alarming amounts. The larger portion of this mortality is true fir. Several fir trees were felled in sale areas for inspection. While a number of pests were noted during the inspection, and while past drought probably contributed to this tree mortality situation, the principle tree-killing agent is now the fir engraver beetle (Scolytus ventralis).

It was commonly found that the infested portion of dying fir trees was out of reach from the ground; however, when felled for complete examination these fading trees were found to usually contain fir engraver beetle broods. These broods are unusually successful in their development with practically no evidence of natural mortality noted during the inspection. This is an indication that fir engraver beetle populations are expanding at a very rapid rate.

In most cases, fir engraver beetle broods were found in mid-size to large larvae periods of development, although in some locations pupae are present. This beetle matures and emerges over an extended interval during the summer. Salvage logging should continue to remove beetles in fading trees for several weeks and contribute sanitation as well as salvage benefits at least during July. Therefore, salvage sales should progress as readily as possible to accomplish the greatest benefits of the effort.

In east side mixed conifer stands, dying fir is also a conspicuous component of a high level of tree mortality. Rapid salvage of fir mortality should be beneficial here as well; however, there are some areas with special problems as follows:

Alder Creek. Here both pine and fir mortality is very high but most of the trees are sub-merchantable size. Stands appear to be overstocked. Widespread tree mortality following an adverse

period of drought suggests a poor balance between site capacities and growing stock. More detailed, silvicultural examination and appropriate treatment seems logical. However, severe thinning in the immediate future might prove detrimental by creating green slash and exposing weakened trees to additional light and wind while high insect populations are active. Perhaps silvicultural examination should be done soon to decide what should follow and when.

Bear Valley. A cable sale is planned to remove dying Jeffrey pine overstory. The Jeffrey pine beetle is suspected to be killing most of the trees in this small sale area but these beetles have reached the pupae stage of development and will emerge before the sale can be made. When the dead trees are removed in August and September, a search should be made to find green infested trees in the sale and adjacent areas so that these too can be removed if any are present.

Rare II (Bald Mt.). This area was viewed from a distance and tree mortality in large trees is apparent. Considerations about entering this area for salvage should be faced soon because if the area is eventually returned to multiple use management, the timber resource may be seriously depleted and lost due to continuing tree mortality.

W. L. Freeman

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